

Replacement Sheet 1 of 15  
Applicants: Takuji MAEDA et al.  
Title: SEMICONDUCTOR MEMORY CARD,  
AND ACCESSING DEVICE AND  
METHOD  
February 6, 2006  
Docket No. 0074/065001

FIG. 6 A

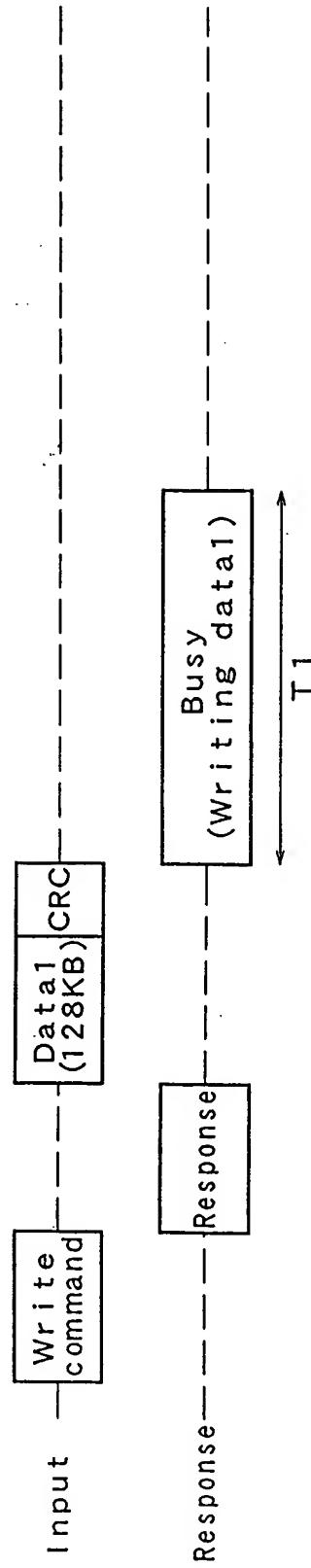
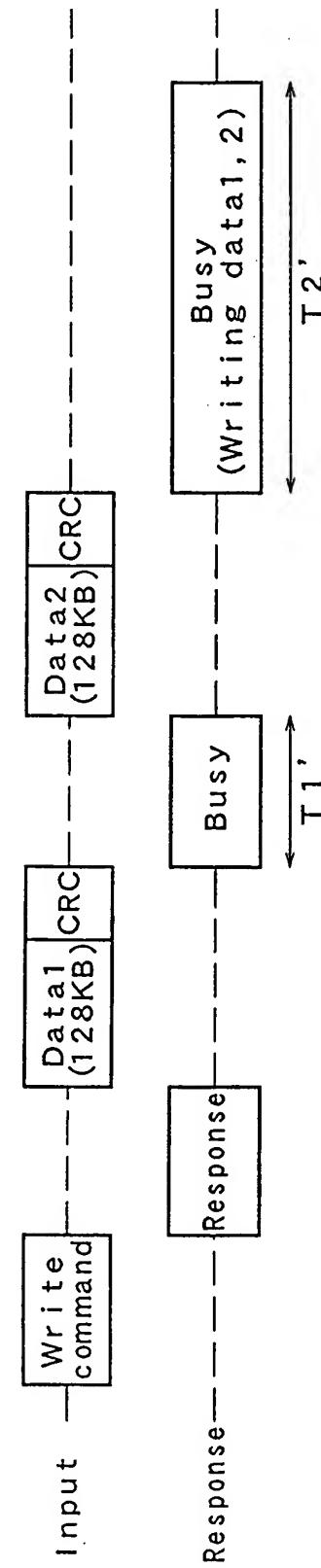


FIG. 6 B



Replacement Sheet 2 of 15  
Applicants: Takuji MAEDA et al.  
Title: SEMICONDUCTOR MEMORY CARD,  
AND ACCESSING DEVICE AND  
METHOD  
February 6, 2006  
Docket No. 0074/065001

FIG. 11A

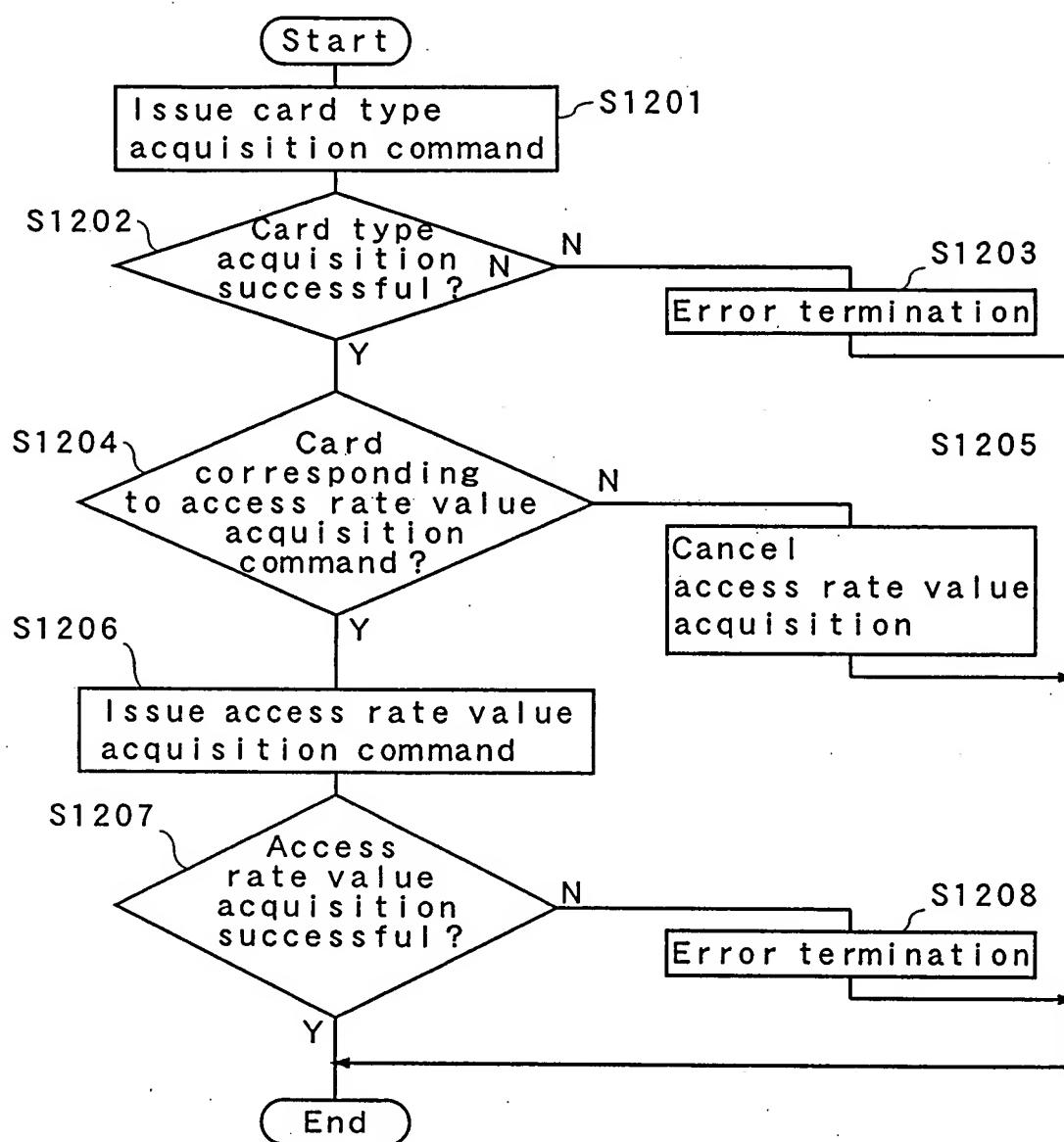
Items	Condition values
Process unit size	Multiple length of 128 KB
Process unit boundary	Multiple length of 128 KB
Access method	Sequentially accessing to sequential area having 256 KB over
Input clock frequency	25 MHz over
Bit width	4 bits

FIG. 11B

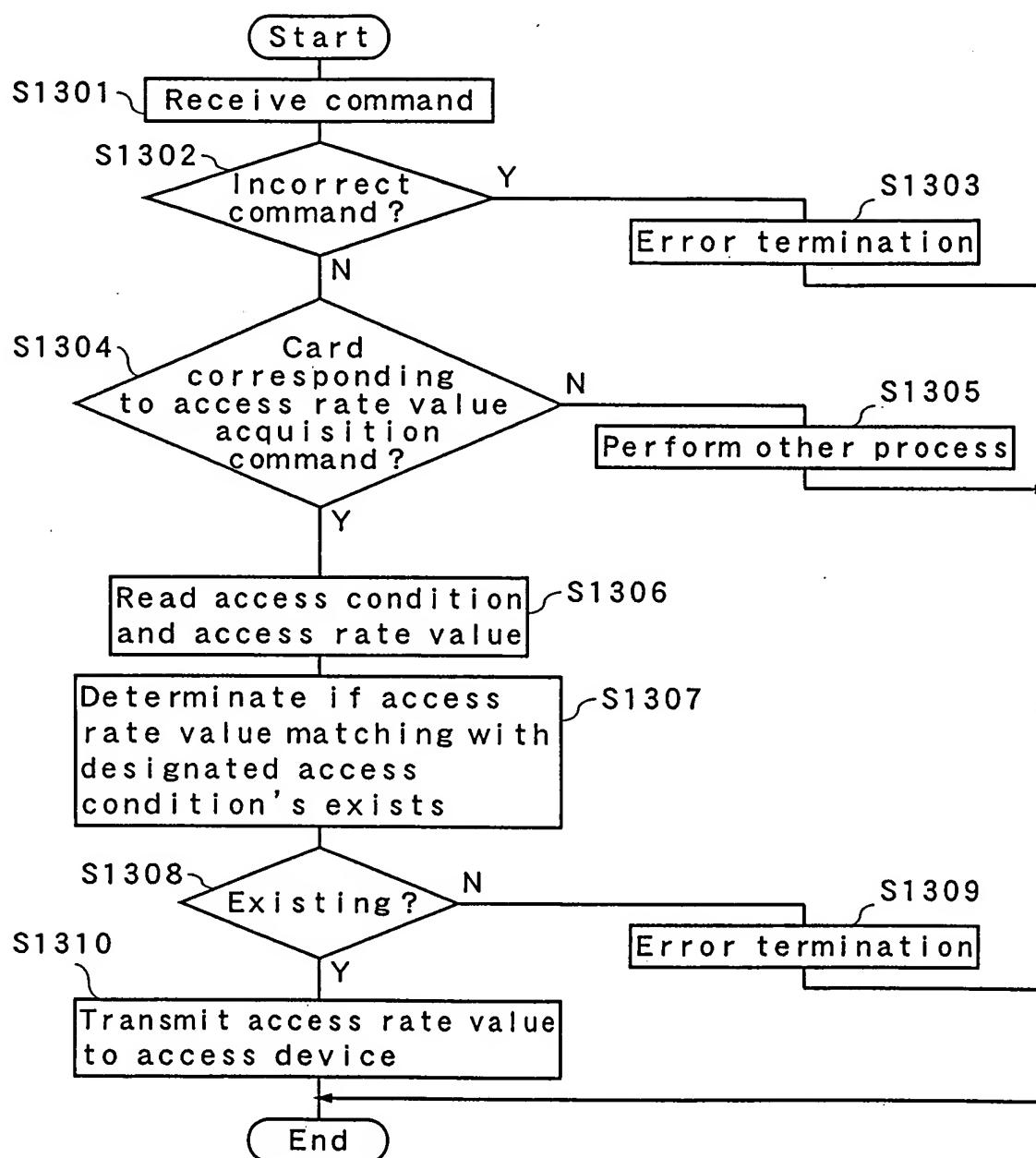
Transfer rate of reading(standard) = 11 MB/s
Transfer rate of writing(standard) = 10 MB/s
Transfer rate of erasing(standard) = 10.3 MB/s
Transfer rate of reading(worst) = 6 MB/s
Transfer rate of writing(worst) = 5 MB/s
Transfer rate of erasing(worst) = 5.1 MB/s

Replacement Sheet 3 of 15  
Applicants: Takuji MAEDA et al.  
Title: SEMICONDUCTOR MEMORY CARD,  
AND ACCESSING DEVICE AND  
METHOD  
February 6, 2006  
Docket No. 0074/065001

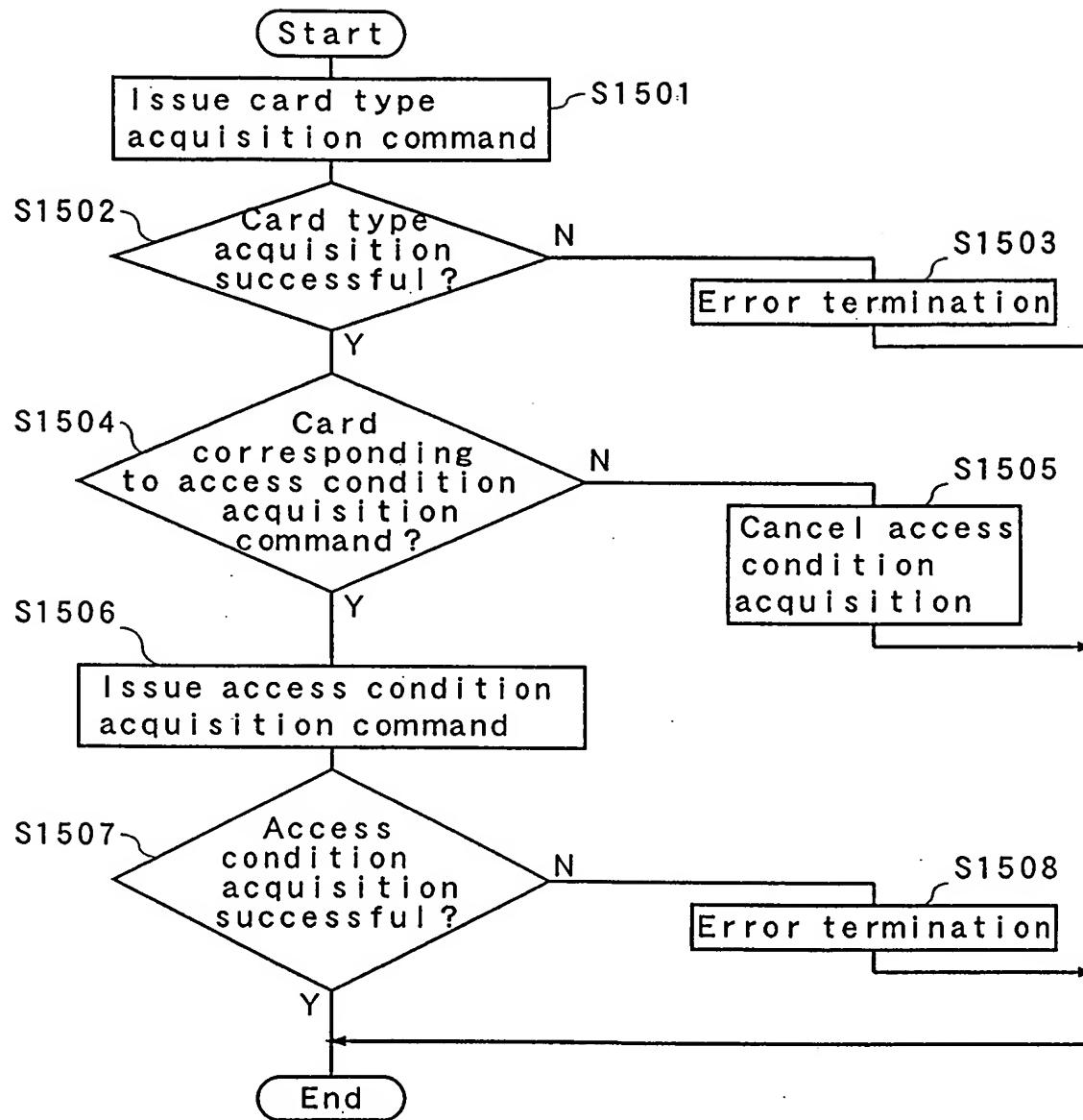
F I G. 1 2



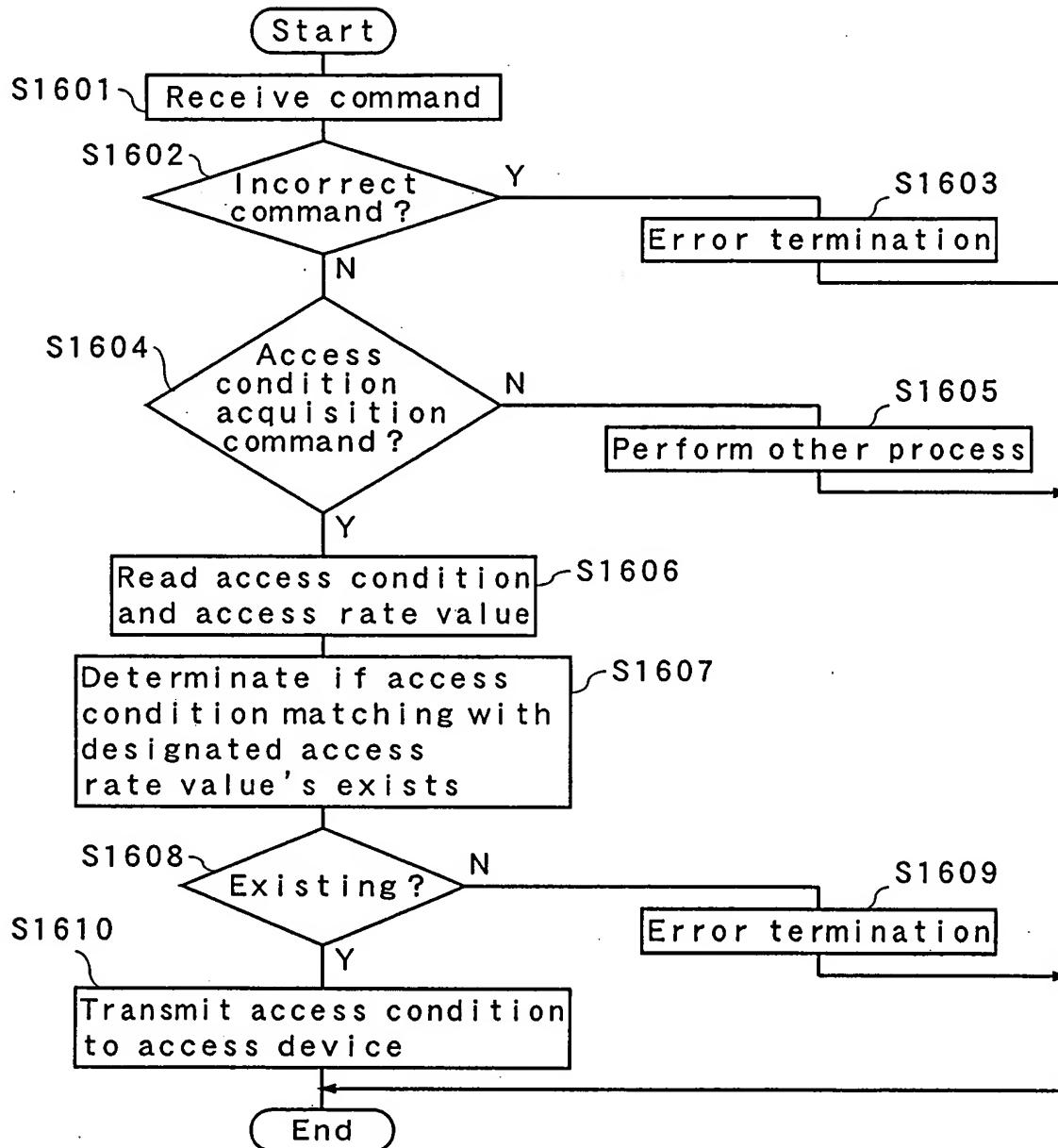
F I G. 1 3



F I G. 15



F I G. 1 6



Replacement Sheet 7 of 15  
 Applicants: Takuji MAEDA et al.  
 Title: SEMICONDUCTOR MEMORY CARD,  
 AND ACCESSING DEVICE AND  
 METHOD  
 February 6, 2006  
 Docket No. 0074/065001

FIG. 19A

		Process contents		
		Reading	Writing	Erasing
Rate performance level	High	Standard trans. rate $\geq 8.0 \text{ MB/s}$	Standard trans. rate $\geq 8.0 \text{ MB/s}$	Standard trans. rate $\geq 8.0 \text{ MB/s}$
	Medium	4.0 MB/s $\leq$ Standard trans. rate $< 8.0 \text{ MB/s}$	4.0 MB/s $\leq$ Standard trans. rate $< 8.0 \text{ MB/s}$	4.0 MB/s $\leq$ Standard trans. rate $< 8.0 \text{ MB/s}$
	Low	Standard trans. rate $< 4.0 \text{ MB/s}$	Standard trans. rate $< 4.0 \text{ MB/s}$	Standard trans. rate $< 4.0 \text{ MB/s}$

FIG. 19B

Transfer rate	Rate performance level
Transfer rate of reading (standard) = 11 MB/s	High
Transfer rate of writing (standard) = 10 MB/s	High
Transfer rate of erasing (standard) = 10.3 MB/s	High
Transfer rate of reading (worst) = 6 MB/s	High
Transfer rate of writing (worst) = 5 MB/s	High
Transfer rate of erasing (worst) = 5.1 MB/s	High

FIG. 23 A

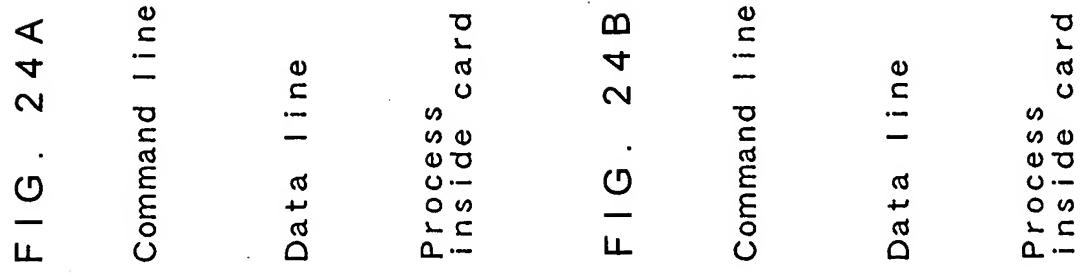
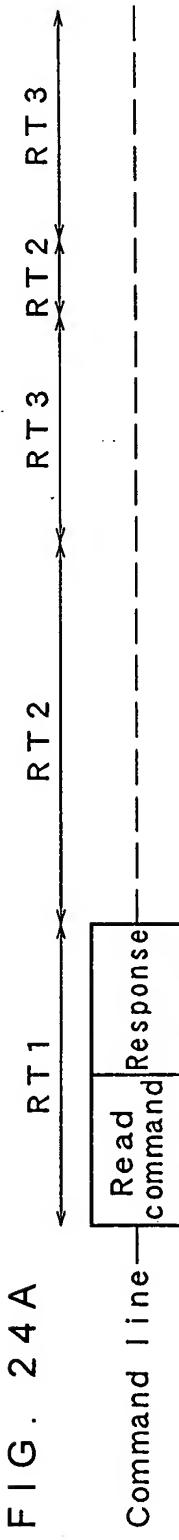
Process Contents		
Reading	Writing	Erasing
Table 1-A	Table 1-B	Table 1-C

FIG. 23 B

Process unit size	Standard value		Worst value	
	SA	RA	SA	RA
512 Bytes	17 ms	25 ms	25 ms	51 ms
16 KB	43 $\mu$ s	690 $\mu$ s	128 $\mu$ s	1.6 ms
128 KB	9.2 $\mu$ s	22 $\mu$ s	60 $\mu$ s	86 $\mu$ s
256 KB	9.2 $\mu$ s	22 $\mu$ s	60 $\mu$ s	86 $\mu$ s
1 MB	9.2 $\mu$ s	22 $\mu$ s	60 $\mu$ s	86 $\mu$ s

February 6, 2006  
Docket No. 0074/065001

FIG. 24 A



February 6, 2006  
Docket No. 0074/065001

FIG. 26A

Process contents			
	Reading	Writing	Erasing
Input clock	12.5 MHz	Table 1-A	Table 1-B
	25 MHz	Table 2-A	Table 2-B
	50 MHz	Table 3-A	Table 3-B

FIG. 26B

Process unit size	Standard value		Worst value	
	SA	RA	SA	RA
512 Bytes	0.03 MB/s	0.02 MB/s	0.02 MB/s	0.01 MB/s
16 KB	6 MB/s	0.7 MB/s	3 MB/s	0.3 MB/s
128 KB	10 MB/s	8 MB/s	5 MB/s	4 MB/s
256 KB	10 MB/s	8 MB/s	5 MB/s	4 MB/s
1 MB	10 MB/s	8 MB/s	5 MB/s	4 MB/s

FIG. 27 A

Process contents			
	Reading	Writing	Erasing
Input clock	12.5 MHz	Table 1-A	Table 1-B
	25 MHz	Table 2-A	Table 2-C
	50 MHz	Table 3-A	Table 3-C

FIG. 27 B

Process unit size	Standard value		Worst value	
	SA	RA	SA	RA
512 Bytes	17 ms	26 ms	26 ms	51 ms
16 KB	3 ms	23 ms	5 ms	55 ms
128 KB	13 ms	16 ms	26 ms	33 ms
256 KB	26 ms	33 ms	52 ms	66 ms
1 MB	105 ms	131 ms	210 ms	262 ms

FIG. 28 A

Process contents			
	Reading	Writing	Erasing
Input clock	12.5 MHz	Table 1-A	Table 1-B
	25 MHz	Table 2-A	Table 2-B
	50 MHz	Table 3-A	Table 3-B

FIG. 28 B

Process unit size	Standard value		Worst value	
	S A	R A	S A	R A
512 Bytes	0.03 MB/s	0.02 MB/s	0.02 MB/s	0.01 MB/s
16 KB	6 MB/s	0.7 MB/s	3 MB/s	0.3 MB/s
128 KB	10 MB/s	8 MB/s	5 MB/s	4 MB/s
256 KB	10 MB/s	8 MB/s	5 MB/s	4 MB/s
1 MB	10 MB/s	8 MB/s	5 MB/s	4 MB/s

FIG. 34 A

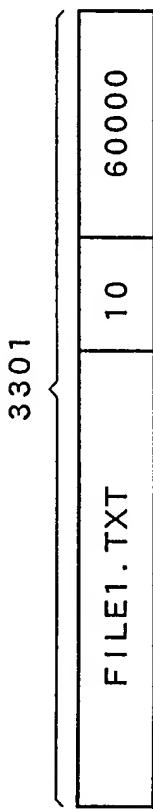


FIG. 34 B

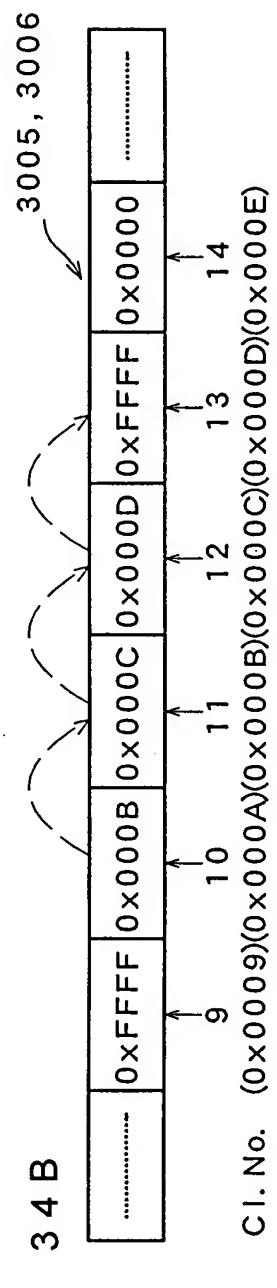
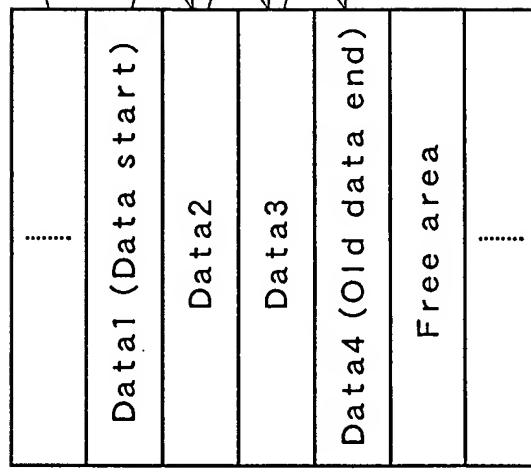


FIG. 34 C C1. No.



February 6, 2006

Docket No. 0074/065001

FIG. 35 A

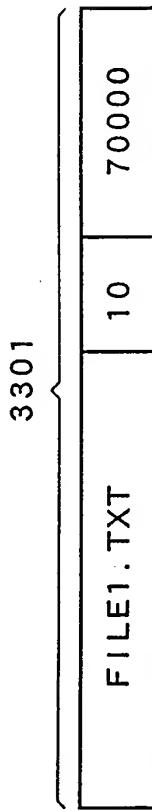


FIG. 35 B

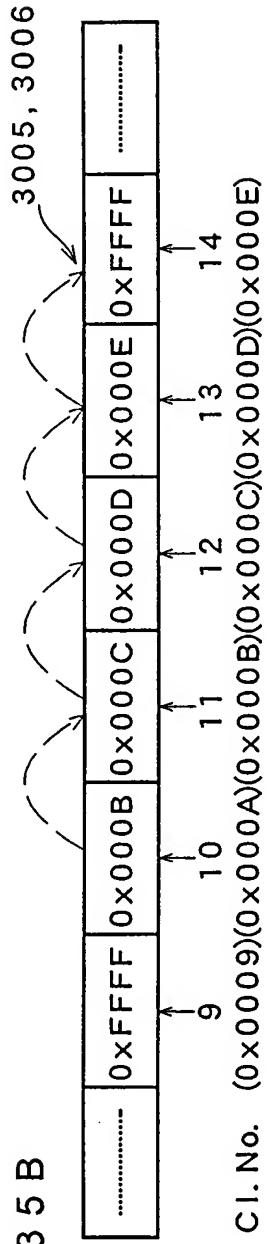
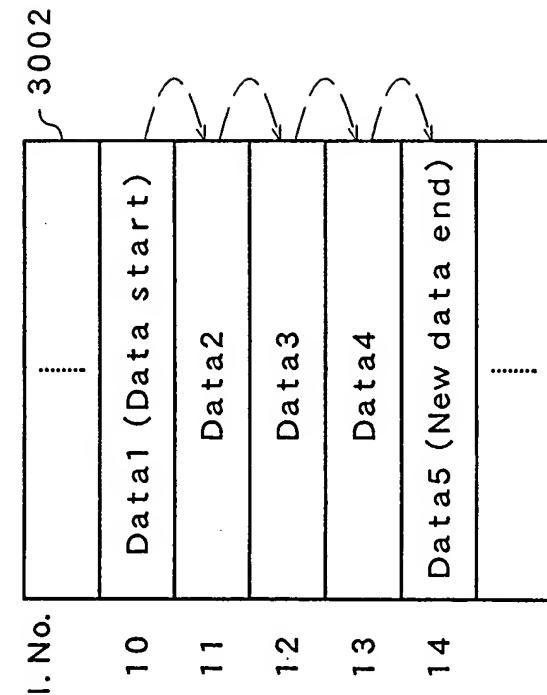


FIG. 35 C



## F I G. 37

